



Dart Aerospace Ltd.  
1270 Aberdeen St  
Hawkesbury, ON  
K6A 1K7  
Canada

Tel (613) 632-5200  
Fax 613 632-5246

646.3315  
Job Sheet 185775



Part No: 646.3315

Job Qty: 10 ea

Part Name: Blade



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 11/1/18

Job Tracking No:

Due Date: 11/30/18

Created By: Marie Lajeunesse

Type: Stock

Description:

Note: DWG REV A IPP REV:A NEW ISSUE 12/11/07 JFS VERIFY BY: JLM

Ship Via:

### Bill of Materials

### Job Routing

| Op No | Operation              | Qty    | Start Date | Due Date | Standard  |         | Workcenter/Supplier   |           | Sign-off       |
|-------|------------------------|--------|------------|----------|-----------|---------|-----------------------|-----------|----------------|
|       |                        |        |            |          | Setup Hrs | Run Hrs | Workcenter / Supplier | Lead Time |                |
| 90    | Start up Operation     | 10 Ea  | 11/30/18   | 11/30/18 | 0.00      | 0.00    | Start Up Machining-1  |           | mont 15/11/22  |
| 100   | Bandsaw                | 10 pcs | 11/30/18   | 11/30/18 | 0.00      | 0.40    | Bandsaw1              |           | 11/11/22       |
| 110   | CNC Vertical Machining | 10 pcs | 11/30/18   | 11/30/18 | 0.51      | 7.29    | HAAS1-1               |           | mont 15/11/22  |
| 130   | QC                     | 10 pcs | 11/30/18   | 11/30/18 | 0.00      | 0.00    | QC8 Machining-1       |           | 15/11/22       |
| 140   | Outsource              | 10 pcs | 11/30/18   | 11/30/18 |           |         | MEI001-VC             | 15        | 15/11/22       |
| 150   | Packaging              | 10 pcs | 11/30/18   | 11/30/18 | 0.00      | 0.00    | Packaging2            |           | DEC 10 2018    |
| 155   | QC                     | 10 pcs | 11/30/18   | 11/30/18 | 0.00      | 0.00    | QC5                   |           | DEC 10 2018    |
| 160   | SprayPaint             | 10 pcs | 11/30/18   | 11/30/18 | 0.00      | 0.34    | Spray Paint           |           | AS 18-12-17-89 |
| 170   | QC                     | 10 pcs | 11/30/18   | 11/30/18 | 0.00      | 0.00    | QC14                  |           | 38             |
| 180   | Packaging              | 10 pcs | 11/30/18   | 11/30/18 | 0.00      | 0.00    | Packaging3-1          |           | JAN 02 2019    |
| 190   | QC21-SA                | 10 Ea  | 11/30/18   | 11/30/18 | 0.00      | 0.00    | QC21                  |           | 9-89           |

Part Op 100 - Cut Blank at 2.600"

Descriptions: 110 - 1-Machine per folio FB147

140 - HEAT TREAT AS PER DWG 646.3300 FINISH: HEAT TREAT TO 58-62 RC ROCKWELL HARDNESS PART ARE MADE FROM AISI A2 TOOL STEEL PLEASE NOTE: DETAIL C OF C REQUIRED

160 - PRIME AS PER DWG, SEE NOTE #4 5094268

180 - \*\*\*IDENTIFY AS PER APICAL MPP-120 BY STAMPING P# AND REV\*\*\*

P/O: 041874

NOV 28 2018

### Job BOM

| Part / Item            | Component Name                        | Quantity            | Operation             | Container   |
|------------------------|---------------------------------------|---------------------|-----------------------|-------------|
| MSTEEL-A2-B0.500X1.250 | AISI A2 Tool Steel Bar, 0.500 X 1.250 | 2.1700 ft (.217 ea) | 90-Start up Operation | 510104-4.54 |

### Job Allocations

| Operation             | Component Part         | Required | Inventory | Allocated |
|-----------------------|------------------------|----------|-----------|-----------|
| 90-Start up Operation | MSTEEL-A2-B0.500X1.250 | 2        | 40        | 0         |

### Part Specifications

| Spec No | Description | Target/Tolerance          | Limits           | Type  | Special Comments |
|---------|-------------|---------------------------|------------------|-------|------------------|
| 1       | Blade       | 0.325inches $\pm$ 0.005   | 0.330<br>0.320   |       |                  |
| 2       | Blade       | 30.000Degrees $\pm$ 0.500 | 30.500<br>29.500 | Angle |                  |

maxime Lacombe change on route.



DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only ☐

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                   |
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| Work Order: _____<br><br>Part No. _____<br><br>NCR No. _____                                                                                                                                                                                                                                                                                                                                                                                                                                   | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/><br>Suspected Unapproved <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                      | <b>AGAINST DEPARTMENT/PROCESS</b><br><br><div style="display: flex; justify-content: space-between;"> <div>             Skid-tube <input type="checkbox"/><br/>             Machining <input type="checkbox"/><br/>             Thermoforming <input type="checkbox"/><br/>             Large Fab <input type="checkbox"/> </div> <div>             Cross tube <input type="checkbox"/><br/>             Small Fab <input type="checkbox"/><br/>             Finishing <input type="checkbox"/><br/>             Composite <input type="checkbox"/> </div> <div>             Water Jet <input type="checkbox"/><br/>             Prod. Eng. Coord. <input type="checkbox"/><br/>             Rec/Store/Packaging <input type="checkbox"/><br/>             Supplier <input type="checkbox"/> </div> <div>             Engineering <input type="checkbox"/><br/>             Quality <input type="checkbox"/><br/>             Other <input type="checkbox"/> </div> </div> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Date :                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Step #:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | QTY Effective :                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | MRB (QSI042) Approval                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Description Work Order Deviation                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Disposition                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                   |
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|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Lead hand / Supervisor Approval Verification                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | QC / QA Coordinator Approval                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Root Cause                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | FAULT CATEGORY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Environment <input type="checkbox"/><br>Design <input type="checkbox"/><br>Doc/Data <input type="checkbox"/><br>Equip/Tooling <input type="checkbox"/><br>Handling/Pre <input type="checkbox"/><br>Material <input type="checkbox"/><br>Internal Transport <input type="checkbox"/><br>Tribal Knowledge <input type="checkbox"/><br>LOA <input type="checkbox"/><br>Substation <input type="checkbox"/><br>Past Expiry Date <input type="checkbox"/><br>Misidentified <input type="checkbox"/> | No Re-verification <input type="checkbox"/><br>Operator <input type="checkbox"/><br>Offset/Setup <input type="checkbox"/><br>Supplier <input type="checkbox"/><br>Training <input type="checkbox"/><br>Use for Testing <input type="checkbox"/><br>Poor Information <input type="checkbox"/><br>Rushing <input type="checkbox"/><br>Product Improvement <input type="checkbox"/><br>Process Improvement <input type="checkbox"/><br>Manufacturing Process <input type="checkbox"/><br>Past Due <input type="checkbox"/> | Pressure/Forced <input type="checkbox"/><br>Bending <input type="checkbox"/><br>Centre Not Concentric <input type="checkbox"/><br>Cracks <input type="checkbox"/><br>Crimp/Kink/Ripple/Wave <input type="checkbox"/><br>Cuffs <input type="checkbox"/><br>Crushing <input type="checkbox"/><br>Heat Treat <input type="checkbox"/><br>Wave/Twist in Tube <input type="checkbox"/><br>Marks/Chatter <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Temperature/Cure <input type="checkbox"/><br>Set-up <input type="checkbox"/><br>BOM/Route <input type="checkbox"/><br>Broken/Damage/Defect <input type="checkbox"/><br>Inspection Incomplete/Unqualified <input type="checkbox"/><br>Contamination <input type="checkbox"/><br>Countersink <input type="checkbox"/><br>Cut Too Short <input type="checkbox"/><br>Instructions Incomplete/Unclear <input type="checkbox"/><br>Drill Holes <input type="checkbox"/> | Power Loss/Surge <input type="checkbox"/><br>Folio/Program <input type="checkbox"/><br>Grain <input type="checkbox"/><br>Weld <input type="checkbox"/><br>Wrong Stock Pulled <input type="checkbox"/><br>Out of Sequence <input type="checkbox"/><br>Off-set <input type="checkbox"/><br>Misabeled <input type="checkbox"/><br>Fit/Function <input type="checkbox"/><br>Misaligned/off center <input type="checkbox"/> | Positioned Wrong <input type="checkbox"/><br>Outside Dimensions <input type="checkbox"/><br>Over/Under tolerance <input type="checkbox"/><br>Part Incorrect <input type="checkbox"/><br>Part Lost/Missing <input type="checkbox"/><br>Part Moved <input type="checkbox"/><br>Drawing <input type="checkbox"/><br>Finish <input type="checkbox"/><br>Misread <input type="checkbox"/><br>Turning Sequence <input type="checkbox"/> |
| OTHER :                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                   |

|    |       |                                |                  |          |
|----|-------|--------------------------------|------------------|----------|
| 3  | Blade | 0.375inches $\pm$ 0.005        | 0.380<br>0.370   |          |
| 4  | Blade | 2.460inches $\pm$ 0.010        | 2.470<br>2.450   |          |
| 5  | Blade | 1.817inches $\pm$ 0.005        | 1.822<br>1.812   |          |
| 6  | Blade | 1.192inches $\pm$ 0.002        | 1.194<br>1.190   |          |
| 7  | Blade | 0.250inches $\pm$ 0.002        | 0.252<br>0.248   |          |
| 8  | Blade | 0.256inches $\pm$ 0.002        | 0.258<br>0.254   |          |
| 9  | Blade | 0.290inches $\pm$ 0.002        | 0.292<br>0.288   |          |
| 10 | Blade | 0.940inches $\pm$ 0.010        | 0.950<br>0.930   |          |
| 11 | Blade | 0.177inches + 0.005<br>- 0.001 | 0.182<br>0.176   | Diameter |
| 12 | Blade | 55.600Degrees $\pm$ 0.500      | 56.100<br>55.100 | Angle    |

Plex 11/1/18 3:08 PM Dart.lajeunesse.marie



DQA: \_\_\_\_\_ Date: \_\_\_\_\_



# WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only ☐

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| Work Order: _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  | DISPOSITION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  | AGAINST DEPARTMENT/PROCESS                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |
| Part I _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  | Rework <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  | Skid-tube <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                    |  | Cross tube <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                         |  | Water Jet <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                 |  | Engineering <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
| NCR I _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  | Scrap <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  | Machining <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                    |  | Small Fab <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                          |  | Prod. Eng. Coord. <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                         |  | Quality <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  | Use-as-is <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  | Thermofforming <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                               |  | Finishing <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                          |  | Rec/Store/Packaging <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                       |  | Other <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  | Suspected Unapproved <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  | Large Fab <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                    |  | Composite <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                          |  | Supplier <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |
| Date: _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  | Step # _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  | QTY Effective _____                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  | MRB (QSI042) Approval                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  | Disposition                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  | Completed By                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  | Lead hand / Supervisor Approval Verification                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  | QC / QA Coordinator Approval                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |
| <p><b>DART AEROSPACE</b></p> <p>Container No: S130578</p> <p>Part: 646.3315</p> <p>Job No: 185775</p> <p>Serial No/Batch: S130578</p> <p>Revision: _____</p> <p>Inspector: _____</p> <p>Exp Date: _____</p> <p>Instructions: _____</p> <p>Date: 11/22/18</p>                                                                                                                                                                                                                                                                                      |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |
| <p>Environment <input type="checkbox"/></p> <p>Design <input type="checkbox"/></p> <p>Doc/Data <input type="checkbox"/></p> <p>Equip/Tooling <input type="checkbox"/></p> <p>Handling/Pre <input type="checkbox"/></p> <p>Material <input type="checkbox"/></p> <p>Internal Transport <input type="checkbox"/></p> <p>Tribal Knowledge <input type="checkbox"/></p> <p>LOA <input type="checkbox"/></p> <p>Substation <input type="checkbox"/></p> <p>Past Expiry Date <input type="checkbox"/></p> <p>Misidentified <input type="checkbox"/></p> |  | <p>No Re-verification <input type="checkbox"/></p> <p>Operator <input type="checkbox"/></p> <p>Offset/Setup <input type="checkbox"/></p> <p>Supplier <input type="checkbox"/></p> <p>Training <input type="checkbox"/></p> <p>Use for Testing <input type="checkbox"/></p> <p>Poor Information <input type="checkbox"/></p> <p>Rushing <input type="checkbox"/></p> <p>Product Improvement <input type="checkbox"/></p> <p>Process Improvement <input type="checkbox"/></p> <p>Manufacturing Process <input type="checkbox"/></p> <p>Past Due <input type="checkbox"/></p> |  | <p>Pressure/force <input type="checkbox"/></p> <p>Bending <input type="checkbox"/></p> <p>Centre Not Concentric <input type="checkbox"/></p> <p>Cracks <input type="checkbox"/></p> <p>Crimp/Kink/Ripple/Wave <input type="checkbox"/></p> <p>Cuffs <input type="checkbox"/></p> <p>Crushing <input type="checkbox"/></p> <p>Heat Treat <input type="checkbox"/></p> <p>Wave/Twist in Tube <input type="checkbox"/></p> <p>Marks/Chatter <input type="checkbox"/></p> |  | <p>Set-up <input type="checkbox"/></p> <p>BOM/Route <input type="checkbox"/></p> <p>Broken/Damage/Defect <input type="checkbox"/></p> <p>Inspection Incomplete/Unqualified <input type="checkbox"/></p> <p>Contamination <input type="checkbox"/></p> <p>Countersink <input type="checkbox"/></p> <p>Cut Too Short <input type="checkbox"/></p> <p>Instructions Incomplete/Unclear <input type="checkbox"/></p> <p>Drill Holes <input type="checkbox"/></p> |  | <p>Power Loss/Surge <input type="checkbox"/></p> <p>Folio/Program <input type="checkbox"/></p> <p>Grain <input type="checkbox"/></p> <p>Weld <input type="checkbox"/></p> <p>Wrong Stock Pulled <input type="checkbox"/></p> <p>Out of Sequence <input type="checkbox"/></p> <p>Off-set <input type="checkbox"/></p> <p>Mislabeled <input type="checkbox"/></p> <p>Fit/Function <input type="checkbox"/></p> <p>Misaligned/off center <input type="checkbox"/></p> |  | <p>Positioned Wrong <input type="checkbox"/></p> <p>Outside Dimensions <input type="checkbox"/></p> <p>Over/Under tolerance <input type="checkbox"/></p> <p>Part Incorrect <input type="checkbox"/></p> <p>Part Lost/Missing <input type="checkbox"/></p> <p>Part Moved <input type="checkbox"/></p> <p>Drawing <input type="checkbox"/></p> <p>Finish <input type="checkbox"/></p> <p>Misread <input type="checkbox"/></p> <p>Turning Sequence <input type="checkbox"/></p> |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  | OTHER: _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |





Dart Aerospace Ltd.  
1270 Aberdeen St  
Hawkesbury, ON  
K6A 1K7  
Canada

Tel (613) 632-5200

# **PURCHASE ORDER** **PO041874**

**Supplier:** MEI001-VC  
Metcor Inc.  
560 Boul. Arthur Sauve  
Saint-Eustache  
QC  
J7R 5A8 Canada  
Phone: 450 473 1884  
Fax: 450 491 5498

**PO No:** PO041874  
**PO Date:** 11/28/18  
**Due Date:** 12/11/18  
**Purchase Order Revision:**  
**Revision Date:**  
**Ship-To Contact:** Tsimiklis, ChrisoulaPhone:

**Ship To:** 1270 Aberdeen Street  
Hawkesbury  
ON  
K6A 1K7 Canada  
Phone: 613-632-5200

**Via:** Ground  
**Pymt Terms:** Net 30  
**Freight Terms:**  
**Special Comments:**

## **Items**

| Line Item | Job    | Part     | Description                                                                                                                                                                                        | Status | Account | Due Date | Order Quantity | Received Quantity | Balance | Unit Price (CAD) | Extended Price |
|-----------|--------|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|---------|----------|----------------|-------------------|---------|------------------|----------------|
| 1         | 185775 | 646.3315 | Blade<br>HEAT TREAT AS PER<br>DWG 646.3300<br>FINISH: HEAT TREAT TO<br>58-62 RC<br>ROCKWELL HARDNESS<br><br>PART ARE MADE FROM<br>AISI A2 TOOL STEEL<br><br>PLEASE NOTE: DETAIL C<br>OF C REQUIRED | Firmed | -       | 12/11/18 | 30 pcs         | 0 pcs             | 30 pcs  | \$10.40/pcs      | \$312.00       |

30 x DEC 10 2018

**Grand Total: \$312.00**

## **Order Notes**

Procurement Quality Clauses  
A005 right of entry  
A012 chemical and physical test report  
A016 personnel qualification  
A017 raw material identification (as applicable)

A022 Apical Processing  
A024 process certifications  
A026 certification of material conformance

A041 quality management system  
A042 dart notification by supplier  
A043 retention of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program

A049 supplier awareness

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit [www.dartaerospace.com](http://www.dartaerospace.com) for further explanation.

Plex 11/29/18 3:31 PM dart.tsimiklis.chrisoula

# METCOR INC.

560 BOUL. ARTHUR-SAUVÉ  
ST-EUSTACHE, QC J7R 5A8  
Tel: 450-473-1884 / Fax: 450-491-5498

## Reçu de livraison

Delivery Receipt

| BON DE TRAVAIL<br>Order | EXPÉDITEUR<br>Shipper ID | BON D'EXPÉDITION<br>Shipper |
|-------------------------|--------------------------|-----------------------------|
| 332420                  | 1                        | 132995                      |

EXPÉDITION COMPLÈTE / Shipped Complete

CLIENT /Customer 215

**DART AEROSPACE**  
1270 ABERDEEN  
HAWKESBURY, ON K6A 1K7  
Ph: 613-632-5200  
Fax: 613-632-1053



LIVRÉ À /Shipped To

**DART AEROSPACE**  
1270 ABERDEEN  
HAWKESBURY, ON K6A 1K7  
Ph: 613-632-5200  
Fax: 613-632-1053

| COMMANDE DU CLIENT<br>Customer PO | BON DE LIVRAISON DU CLIENT<br>Customer Shipper No. | TYPE DE MATÉRIEL<br>Material Type | DATE DE LA COMMANDE<br>Order Date | TRANSPORTEUR<br>Carrier |
|-----------------------------------|----------------------------------------------------|-----------------------------------|-----------------------------------|-------------------------|
| 41874                             |                                                    | A2                                | 2018/11/28                        | client                  |

| QUANTITÉ<br>Quantity | No. PIÈCE<br>Part No. | NOM DE LA PIÈCE<br>Part Name | DESCRIPTION DE LA PIÈCE<br>Part Description | POIDS<br>Weight |
|----------------------|-----------------------|------------------------------|---------------------------------------------|-----------------|
|----------------------|-----------------------|------------------------------|---------------------------------------------|-----------------|

30 646.3315  
(30) 646.3315  
JOB185775

5,05

1 BC EPS

| TYPE DE CONTENEUR<br>Container Type | # DE CONTENEURS<br># Of Containers | COMMENTAIRES CONTENEUR<br>Container Comments |
|-------------------------------------|------------------------------------|----------------------------------------------|
| BC EPS                              | 1                                  |                                              |

### CERTIFICAT

|                        |  |
|------------------------|--|
| EMPAQUETAGE<br>Packing |  |
|------------------------|--|

QUANTITÉ EXPÉDIÉE / Quantity Shipped : 30

POIDS EXPÉDIÉ / Weight Shipped : 5,05

QUANTITÉ RESTANTE / Quantity Remaining : 0

POIDS RESTANT / Weight Remaining : 0,00

APPROUVÉ

### CERTIFICAT

QUANTITÉ EXPÉDIÉE / Quantity Shipped: 30

POIDS EXPÉDIÉ / Weight Shipped : 5,05

Signature:

Date:

EXPÉDIÉ LE / Shipped On : 2018/12/03



# METCOR INC.

560 BOUL. ARTHUR-SAUVÉ, ST-EUSTACHE, QC, J7R 5A8

Tél.: 450-473-1884

Télécopieur / Fax administration: 450-491-5498

Télécopieur / Fax production: 450 491-6454

## Certificat de Conformité Certificate of Compliance

| BON DE TRAVAIL<br>order | CHARGEMENT<br>load |
|-------------------------|--------------------|
| 332420                  | 1                  |

CLIENT / customer 215

DART AEROSPACE

1270 ABERDEEN

HAWKESBURY

ON K6A 1K7

LIVRÉ À / shipped to:

DART AEROSPACE

1270 ABERDEEN

HAWKESBURY

ON K6A 1K7

1

| COMMANDE DU CLIENT<br>customer po | CLASSIFICATION PIECE<br>part classification | MATÉRIEL<br>material | MAÎTRE D'OEUVRE<br>prime contractor | PROGRAM |
|-----------------------------------|---------------------------------------------|----------------------|-------------------------------------|---------|
| 41874                             | N/A                                         | A2                   |                                     |         |

### SPÉCIFICATIONS DU PROCÉDÉ processing specifications

VAC HARDEN

HARDEN AND TEMPER

| EXIGENCE / requirement | SPÉCIFICATIONS / specified | TESTS EXÉCUTÉS / performed | RÉSULTATS DE TESTS / results |
|------------------------|----------------------------|----------------------------|------------------------------|
| HARDNESS               | 58 - 62 HRC                | 5                          | 59 - 61 HRC                  |

| QUANTITÉ<br>quantity | POIDS<br>weight | DESCRIPTION DES PIÈCES<br>parts description        |
|----------------------|-----------------|----------------------------------------------------|
| 30                   | 5,05            | 646.3315<br>(30) 646.3315<br>JOB185775<br>1 BC EPS |

11/12/18

### COMMENTAIRES / comments

APPROUVÉ par / Approved by:



DATE: 2018-12-01

APPROUVÉ



# METCOR INC.

560 BOUL. ARTHUR-SAUVÉ, ST-EUSTACHE, QC, J7R 5A8

Tél.: 450-473-1884

Télécopieur / Fax administration: 450-491-5498

Télécopieur / Fax production: 450 491-6454

## Certificat de Conformité Détaillé

Detailed Certificate of Compliance

| BON DE TRAVAIL<br>order | CHARGEMENT<br>load |
|-------------------------|--------------------|
| 332420                  | 1                  |

CLIENT / customer 215

DART AEROSPACE

1270 ABERDEEN

HAWKESBURY

ON K6A 1K7

LIVRÉ À / shipped to:

DART AEROSPACE

1270 ABERDEEN

HAWKESBURY

ON K6A 1K7

1

|                                                                           |                                             |                                                        |                                     |                              |
|---------------------------------------------------------------------------|---------------------------------------------|--------------------------------------------------------|-------------------------------------|------------------------------|
| COMMANDE DU CLIENT<br>customer po                                         | CLASSIFICATION PIECE<br>part classification | MATÉRIEL<br>material                                   | MAÎTRE D'OEUVRE<br>prime contractor | PROGRAM                      |
| 41874                                                                     | N/A                                         | A2                                                     |                                     |                              |
| <div>SPÉCIFICATIONS DU PROCÉDÉ</div> <div>processing specifications</div> |                                             |                                                        |                                     |                              |
| VAC HARDEN                                                                |                                             |                                                        |                                     |                              |
| HARDEN AND TEMPER                                                         |                                             |                                                        |                                     |                              |
| EXIGENCE / requirement                                                    | SPÉCIFICATIONS / specified                  |                                                        | TESTS EXÉCUTÉS / performed          | RÉSULTATS DE TESTS / results |
| HARDNESS                                                                  | 58 - 62 HRC                                 |                                                        | 5<br>(915)                          | 59 - 61 HRC                  |
| QUANTITÉ<br>quantity                                                      | POIDS<br>weight                             | DESCRIPTION DES PIÈCES<br>parts description            |                                     |                              |
| 30                                                                        | 5.05                                        | 646.3315<br>(30) 646.3315<br>JOB185775<br><br>1 BC EPS |                                     |                              |

### COMMENTAIRES / comments

VAC HARDEN 1800F, 1:30 HR  
DOUBLE TEMPER 400F, 2 HRS

Heat treatment (HT) was performed with equipment that meets the requirements of requested specification. All HT operations were performed in compliance with the required HT specification and all verifications have been performed and documented. No unauthorized changes were performed in regards to the HT. We certify that the material was manufactured, sampled, tested and inspected in accordance with the material specification and the purchase order and was found to meet the requirements.

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Le traitement thermique (TT) a été fait en utilisant des équipements en conformité avec la spécification demandée. Toutes les opérations de TT ont été faites en conformité avec les requis de la spécification demandée et toutes les vérifications et les tests demandés ont été faites et documentés. Aucun changement n'a été faite par rapport au TT. On certifie que le matériel a été fabriqué, échantillonné, testé et inspecté en accord avec les spécifications du matériel et le bon de commande et le matériel rencontre les exigences spécifiées.

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*Isabel C*

Isabel Otero  
QA Technician



04 DEC. 2018